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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY



Building The
Wireless Future

CTIA

Cellular
Telecommunications
Industry Association
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Michael F. Altschul
Vice President,
General Counsel

July 2, 1997

Mr. William F. Caton
Secretary
Federal Communications Commission
1919 M Street, NW, Room 222
Washington, DC 20554

Re: Ex Parte Presentation
CC Docket No. 94-102

Dear Mr. Caton:

On July 1, 1997, the Cellular Telecommunications Industry Association ("CTIA"), represented by Michael Altschul, Ed Hall, Art Prest, Kirk Carlson (Synacom), and Carol Bjelland and Jeff Crollick (both from GTE), met with Nancy Boocker, Ron Netro, Thomas Buckley, Steve Weingarten, and Brian Lowinger of the Wireless Telecommunications Bureau.

At the meeting, CTIA answered questions posed by the Commission staff concerning the ability of CMRS carriers to process 9-1-1 calls from nonsubscribed-to phones. Copies of the attached documents were provided to the Commission staff attending the meeting.

Pursuant to Section 1.1206 of the Commission's Rules, an original and one copy of this letter and attachments are being filed with your office. If you have any questions concerning this submission, please contact the undersigned.

Sincerely,


Michael Altschul

Attachments



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TARGETED INFORMATION

To: Wireless Industry, FCC, Emergency 9-1-1, Manufacturers of TTY/TDD Equipment, Individuals Concerned with Wireless Access For People with Hearing Impairments

From: Art Prest
Vice President for Science and Technology

Date: June 26, 1997

**CTIA's FORUM: SEEKING SOLUTIONS TO TTY/TDD
THROUGH WIRELESS DIGITAL SYSTEMS**

CTIA is hosting a second E9-1-1 Workshop to be held in Washington D.C. during September, 1997. This Workshop is focused on TTY/TDD requirements established by the FCC's E9-1-1, Report and Order, 94-102 and the various comments and concerns on **how best** to support TTY/TDD communications over **wireless** air interfaces. We will hear comments from the FCC, National Emergency Number Association, National Association for the Deaf as well as wireless carriers, TTY/TDD manufacturers and other subject matter experts.

The goal of the workshop is to obtain industry and consumer organization consensus regarding TTY/TDD Technology and its communications over digital wireless systems. The Workshop will provide practical information about the needs of people with hearing impairments, the communication challenges facing the wireless industry, the ongoing work efforts and will explore and help define next generation TTY/TDD capabilities.

The specific dates in September for the Workshop will be announced shortly. Registration forms and related information will be available starting July 15, 1997. For information please contact Robert Montgomery at (202)-736-3258, e-mail: rmontgomery@ctia.org or Janette Stout (202)-736-3224 or, jstout@ctia.org.



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TR-45.2

Wireless Emergency

Services

Standards Update



Wireless Emergency Services Standards Update

FCC R&O Requirements

❖ CMRS must

- ◆ Provide Call Back Number**
- ◆ Location**

❖ PSAP must

- ◆ Prove capability to receive data**
- ◆ Prove funding mechanism is in place**

Wireless Emergency Services Standards Update

FCC R&O Requirements

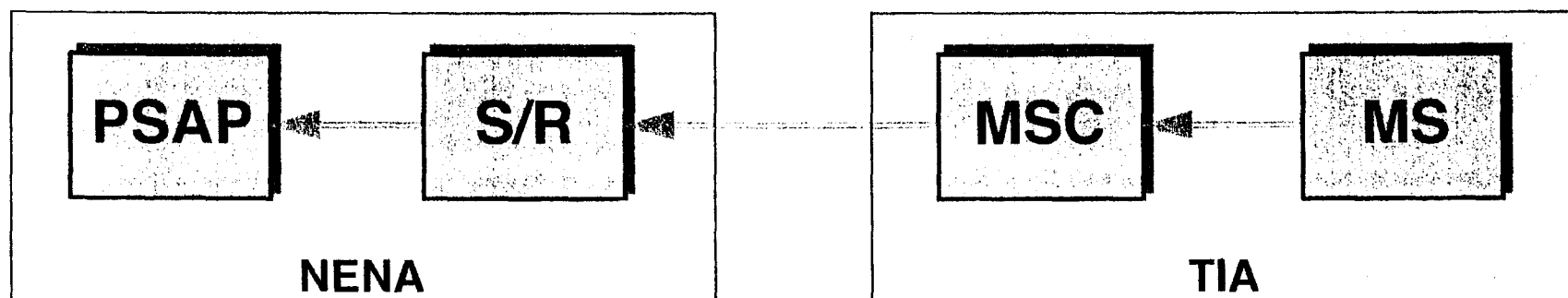
- ❖ **“Non-code identified” calls must be forwarded if formally requested by PSAP**
- ❖ **Support for TDD**
 - ◆ **Traditional TTY**
 - ◆ **Substitute**

FCC Phase I Requirements

- ❖ **Provide Automatic Number Identification (ANI) — Call Back Number**
- ❖ **Provide Callers location relative to initial Base Station or Cell Site**
- ❖ **Must be available by 4/1/98**

Wireless Emergency Services Standards Update

Phase I Simplified Reference Model



Wireless Emergency Services Standards Update

Affected Standards

- ❖ **TIA/EIA-664 – Service Descriptions**
 - ❖ **AMPS based systems (800 MHz and 1800 MHz)**
- ❖ **EIA/TIA IS-104 – Service Descriptions**
 - ❖ **PCS1900 based systems**
- ❖ **TIA/EIA-41 – Intersystem Operations**
 - ❖ **AMPS based systems (800 MHz and 1800 MHz)**

Wireless Emergency Services Standards Update

Affected Standards

- ❖ **J-STD-023 – PCN to PCN Intersystem Operations based on PCS1900**
- ❖ **J-STD-024 – Personal Communication Services, SS7 based A-interface**
 - ❖ **PCS1900 based systems**
- ❖ **TIA/EIA IS-93 – PSTN / ISDN Interconnection**
 - ❖ **AMPS based systems (800 MHz and 1800 MHz)**
 - ❖ **PCS1900 based systems**

Wireless Emergency Services Standards Update

Phase I Services

- ❖ **Mobile Subscriber**
 - ◆ **Emergency Services**
- ❖ **PSAP**
 - ◆ **Emergency Services Call To The PSAP**
 - ◆ **Emergency Services Call From The PSAP**

Emergency Services

- ❖ **Permits a subscriber to dial 9-1-1 from a mobile station and be connected to a PSAP based on current location**
 - ❖ **Bypasses any authorization or call origination restrictions**
 - ❖ **Automatically invokes PACA, if enabled**
 - ❖ **Flash privileges are suspended except to reconnect a held party**

Emergency Services Call To The PSAP

- ❖ **Allows for addition of third party to call if calling party subscribes to three way calling**
- ❖ **Reconnects PSAP to subscriber after radio contact is lost**
 - ❖ **PSAP may receive audible indication of radio loss**

Emergency Services Call From The PSAP

- ❖ **Permits PSAP to callback a subscriber that previously dialed 9-1-1**
 - ❖ **Invoked by dialing MS's MDN (provided ANI)**
 - ❖ **Treated as a normal call termination**

Emergency Services Interconnection

❖ **Interconnection via standard PSTN / ISDN methods**

- ◆ **Feature Group D**
- ◆ **ISUP**

Wireless Emergency Services Standards Update

Project Schedule — Phase I

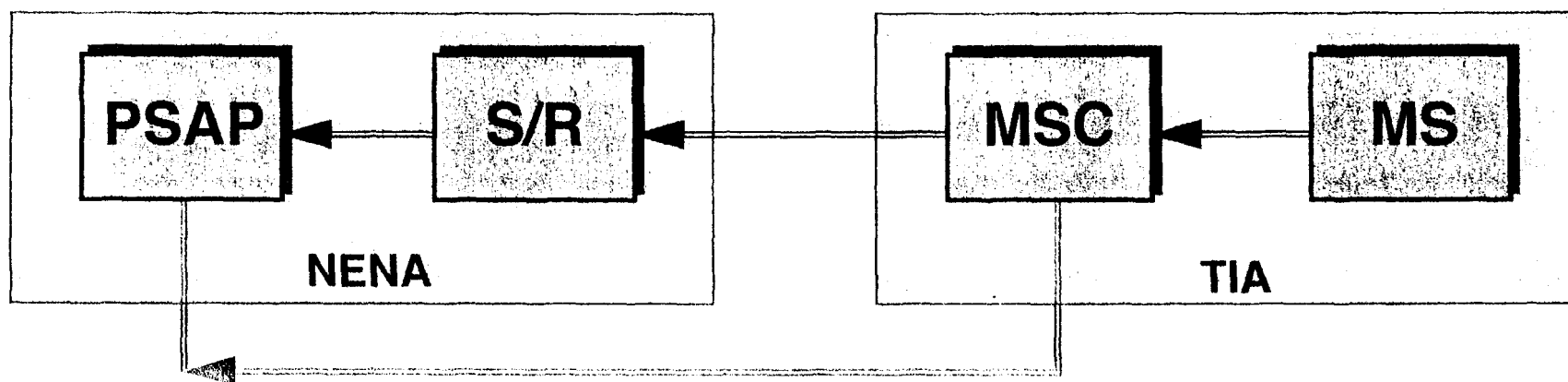
- ❖ **Ballot – 1/97**
 - ◆ shows delta changes to affected standards
- ❖ **Publish – 3Q97**
- ❖ **Available by – 4/1/98**

Phase II — Requirements

- ❖ **Phase I (ANI and Base station / Cell site)**
- ❖ **Provide initial latitude and longitude of caller within 125m RMS (67% of the time)**
- ❖ **Must be available by 10/1/2001**

Wireless Emergency Services Standards Update

Phase II Simplified Reference Model



Wireless Emergency Services Standards Update

Phase II Projects

- ❖ **Call associated**
 - ◆ **Evaluation of enhancements to ISUP**
- ❖ **Non-call associated**
 - ◆ **Project Request – 12/96**
 - **"Emergency Services Data Communications"**
 - Development of methods and procedures for conveying location and other information between wireless systems and emergency services systems
 - Non air interface specific

Wireless Emergency Services Standards Update

Project Schedule — Phase II

- ❖ **Ballot ANSI Standard – 1Q98**
- ❖ **Publish – 2Q98**
- ❖ **Available by – 10/1/2001**

Wireless Emergency Services Standards Update

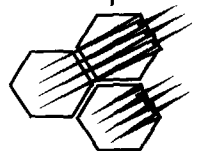
Open Issues

- ❖ **Support of “Non-code identified” mobiles**
 - ◆ **Uninitialized mobiles**
 - ◆ **Unsubscribed**
- ❖ **TDD**
 - ◆ **Analog**
 - ◆ **Digital**

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Validation

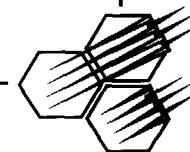
- ❑ **Converts Code Identifier To Call Back Number**



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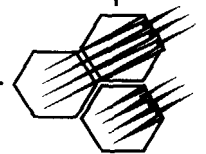
Validation

- **Required For E9-1-1**
 - **To Retrieve Call Back Number**
 - **To Guarantee Uniqueness of Code Identifier**
- **Less Complex**
- **Requires Minimal Switch Upgrades**



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**Nonservice Initialized Phones Can Be
Given Basic 9-1-1 Service In A
Validation Environment
(With Switch Modifications)**



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**Number Portability Adds An
Undetermined Level Of
Complexity To The Process**

